

## REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Appreciation is expressed to Examiner Passaniti for the indicated allowability of Claims 20-29. By way of this Amendment, new Claims 30-37 have been added. Thus, the claims currently at issue are Claims 1-19 and 30-37

Independent Claim 1 is directed to the combination of a long metal iron head and a short metal iron head possessing different lofts. Each of the metal iron heads is formed by respectively casings, one of which comprises the hosel and the strike face. The other casing forming each metal iron head includes a cavity as viewed from a direction facing the front side of the casing. The two casings forming each respective metal iron head are welded to one another such that the cavity in the one casing defines at least a portion of the hollow interior of the respective metal iron head. In addition, Claim 1 recites that the average wall thickness of the strike face of the long metal iron head is less than the average wall thickness of the strike face of the short metal iron head.

The Official Action correctly notes that U.S. Application Publication NO. 2004/0023730 to *Nagai et al.* lacks disclosure of a set of clubs in which the average wall thickness of the strike face of a long metal iron head is less than the average wall thickness of the strike face of a short metal iron head. The Official Action thus relies upon the disclosure in U.S. Patent No. 4,754,969 to *Kobayashi*. This document discloses decreasing the thickness of the face portion of a set of club heads in accordance with the increase in the club-length or the decrease in the club-number.

One difference between the iron golf club heads at issue here and the club heads that would result from the proposed combination of the disclosures in *Nagai et al.* and *Kobayashi '969* is that in the iron golf club heads here, the strike face of the short metal iron head has a substantially uniform wall thickness across the entirety of the strike face of the short metal iron head, while the strike face of the long metal iron head has a substantially uniform wall thickness across the entirety of the strike face of the long metal iron. *Nagai et al.* specifically describes in paragraph [0020] that the thicknesses of portions of the front plate varies so that the middle portion 44 represents the thickest area of the front plate, while the top portion 42 is thinner than the middle portion 44 and the sole portion 46 is thicker than the top portion 42. *Nagai et al.* specifically implements this construction in order to achieve the desired flex of the front plate 40. Thus, if one were somehow motivated to apply the disclosure in *Kobayashi '969* to the iron club head disclosed in *Nagai et al.*, to produce a set of golf club heads comprising a long metal iron head and a short metal iron head, one would not do so in such a way that the strike face of both the short metal iron head and the long metal iron head are of a substantially uniform wall thickness across the entirety of the strike face as now recited in independent Claim 1. Indeed, such a modification would have been contrary to the disclosure in *Nagai et al.* It is thus respectfully submitted that independent Claim 1 is patentably distinguishable over a combination of the disclosures in *Nagai et al.* and *Kobayashi*, as well as the disclosure in U.S. Patent No. 5,110,131 to *Long*. It is understood that this latter document is only relied upon for showing clubs with different loft angles.

Independent Claim 14 also recites iron golf club heads comprising long and short metal iron heads having different lofts. The claimed long and short metal iron

heads possess many of the same features recited in independent Claim 1, except that instead of reciting the thickness characteristics of the strike face of each of the short and long metal iron heads, independent Claim 14 recites that the average hardness of the strike face of the long metal iron is greater than the average hardness of the strike face of the short metal iron head.

Addressing this claim recitation, the Official Action cites U.S. Patent No. 4,398,965 to *Campau*. The Official Action specifically refers to various portions of the disclosure in *Campau*, but the descriptions at the noted places do not support the position that it is known in the art to vary the hardness of the striking face of iron club heads having different lofts. For example, the discussion in lines 15-27 of column 3 of *Campau* merely refers to a flexible and resilient striking surface while the discussion in lines 53-67 of column 4 refers to the thickness of the club head. Further, the discussion in lines 5-32 of column 9 of *Campau* merely describes varying the thickness of the striking plate to address excessive hook spin and excessive slice spin.

Thus, there is no disclosure in *Campau* describing that a long metal iron head and a short metal iron head of different lofts should be fabricated so that the average hardness of the strike face of the long metal iron is greater than the average hardness of the strike face of the short metal iron.

Further, the reliance placed upon the disclosure in U.S. Patent No. 5,362,047 to *Shaw et al.* is misplaced. The discussion in lines 50-60 of column 2 of *Shaw et al.* merely describes that the friction and/or flexural modulus characteristics of the face-piece components of a golf iron can be varied to alter the distance and control characteristics of long and short irons. However, there is once again no disclosure

of varying the hardness characteristics of long and short metal iron club heads as recited in independent Claim 14. Accordingly, a combination of the disclosures in *Nagai et al.*, *Kobayashi*, *Long*, *Campau* and *Shaw* would not have motivated one to do that which is recited in independent Claim 14 as the invention.

New independent Claim 34 defines an iron golf club head comprising, *inter alia*, first and second metal casings welded to one another, with the first metal casing having the hosel and the strike face. Claim 34 also recites that the second casing possesses a first cavity as viewed from a direction facing the front side and a second cavity as viewed from a direction facing the back side. Further, Claim 34 recites that the center of the strike face possesses a hardness that is different from the hardness of the edge of the strike face as described at various places in the application such as at paragraph [0032]. As none of the applied documents disclose an iron golf club head having the construction recited in Claim 34, with a strike face possessing the claimed different hardness characteristics, such claim is allowable.

New independent Claim 37 recites iron golf club heads comprising long and short metal iron heads having different lofts, with each of the iron heads being comprised of a pair of casings, one of which includes the hosel and the strike face. The claim further recites that the strike face of the short metal iron head and the strike face of the long metal iron head are fabricated of different metal materials and that at least the center of the strike face of the long metal iron head is heat treated while the strike face of the short metal iron head is not heat treated so that the strike face of the long metal iron head possesses an average hardness greater than the average hardness of the strike face of the short metal iron head. This aspect of the

disclosed iron golf club heads is described at, for example, paragraph [0032] of the present application.

None of the applied documents discloses the subject matter recited in independent Claim 37, including the strike faces of two metal iron heads of different lofts being fabricated of different materials, with at least the center of the strike face of the long metal iron head being heat treated while the strike face of the short metal iron head is not heat treated so that the average hardness of the strike face of the long metal iron head is greater than the average hardness of the strike face of the short metal iron head. It is thus respectfully submitted that independent Claim 37 is also allowable.

New dependent Claims 30-33 recite that the casing which includes the one cavity also includes another cavity as viewed from a direction facing the back side, with the latter cavity being located above the former as measured with respect to the sole. As the Official Action correctly notes in the middle of page 6, none of the applied documents discloses this claimed aspect of the disclosed subject matter.

The other dependent claims in this application recite additional distinguishing features and characteristics associated with the claimed subject matter. However, as these dependent claims depend from allowable independent claims, a detailed discussion of those additional distinguishing aspects is not set forth at this time.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

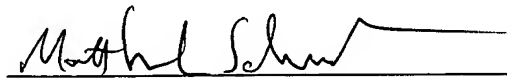
in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: July 10, 2006

By:

A handwritten signature in black ink, appearing to read "Matthew L. Schneider", is written over a horizontal line.

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